

Agricultural Resources

Agricultural resources are typically found in fields stretching behind or beside the domestic yard for some distance, as in the site plan for WS 476 (Figure 3). This is where barns for the sheltering of stock and the storage of crops are located. Barns are typically clustered in one area just beyond the domestic yard area, but some may be found isolated in further fields, tobacco barns in particular. There are also smaller agricultural buildings such as corn cribs and poultry houses, although the latter are often found in the domestic yard or near the border between the domestic and agricultural areas. Poultry houses in particular form a link between the agricultural and domestic spheres as chicken care was often women's work. The boundary between these areas may be cleanly defined by fences, or more vaguely marked by a change in landscaping, moving from the trees, lawn, and ornamental plants surrounding the house to the more open work spaces, pastures, and fields. Many larger farms also have areas of important environmental significance such as forest, streams, and wetlands.

Barns

Among the most distinctive and attractive elements of the rural landscape in Kentucky are its barns. These large, predominantly wood frame buildings are important reminders of our agrarian past. As you travel through the regions of the state, they vary in type, size, form, and even in color. Thus, they help to create the sense of place in each respective region. Barns are an appealing subject for the student of vernacular architecture because their structures are so open for examination. With some notable exceptions, the survey area barns are mostly free of decorative architectural trim: there's the frame, the exterior walling and roof material covering it, windows, doors, and interior divisions. Barns are work buildings designed for efficiency and economy, but they are attractive and picturesque in the way that well designed, purposeful things often are. Barns visible from the road lend themselves well to becoming billboards advertising chewing tobacco or tourism destinations, an aspect currently being revived in a Heritage Tourism effort with the large paintings of quilt patterns placed on barns to form the Kentucky Quilt Trails (see <http://www.kentuckyquilttrail.org/>, and <http://www.visitlebanonky.com/attractions/quilts.htm>).

Barns are distinguished from other agricultural outbuildings mainly on the basis of their larger size. They are used for storing crops; sheltering, feeding, or milking animals; curing tobacco, agricultural processing; and storing farm machinery. Most of them serve multiple functions, but some are more specialized, built mainly for the purpose of dairying or curing tobacco, for example. Barns vary by form as well as function, and the two are not necessarily related. Many are built for one function and later used for another, a dairy barn becoming a tobacco barn, for instance. The predominant barn form in the survey area is the gable entry transverse-crib or transverse-frame barn.⁵⁰ Of 616 barns we have documented by form, 559 are classified as transverse frame barns. The form is very familiar: it has a long aisle down the center from one gable end to the other (Figure 233). The aisles on either side of the center may be divided into stalls or rooms as needed for various functions, and are often ceiled over to create hay lofts above. In cross section, the barn is a simple braced frame (Figure 234), which will vary in construction detail over time and from builder to builder. The transverse frame type may serve variously as a stock barn, multi-purpose barn, hay barn, machine shed, or perhaps most commonly, as a tobacco barn, as in the example at MN 217 (Figure 235).

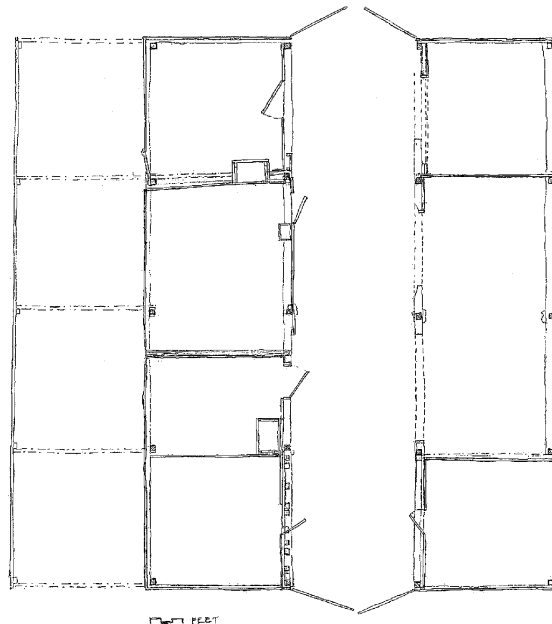


Figure 233: *Plan of a Transverse Frame Barn (Powell County, drawing by author).*

⁵⁰ For a discussion of the evolution of this type of barn, See Karen Hudson, "The Appalachian Region," in Kentucky's Historic Farms (Paducah: Turner Publishing Company, 1993), 108-109.

Another important type is the English barn, which could serve the same purposes as the Transverse frame barn. The English barn has its aisle running through the center across the gable rather than parallel to it (Figure 236), and typically has three sections on the ground floor, the center aisle and the bays on either side of the aisle. Just 17 barns of the 616 we have classified by type are English barns, but the form was much more common in the antebellum period, so documented examples are sometimes early. In some cases, however, the form continues to be built late, even into the 20th century, as at WS 315 (Figure 237).

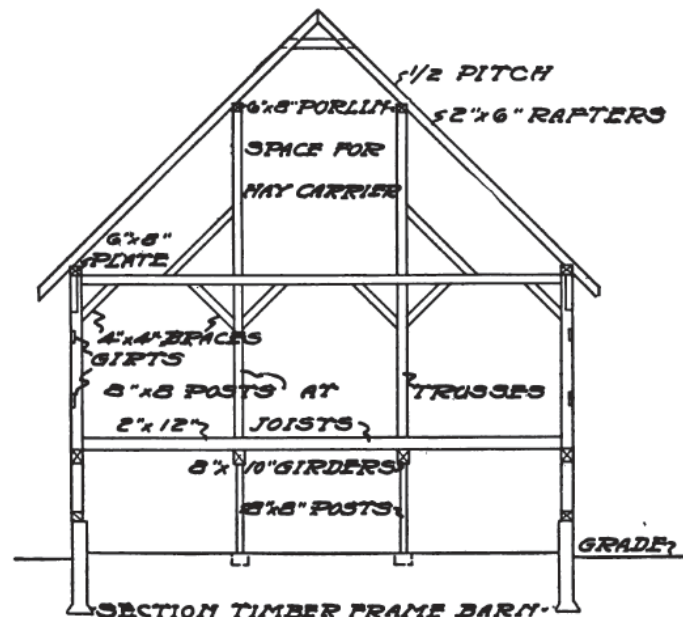


FIG. 65.—Illustrating timber framing for barns.

Figure 234: *Framing Section of a Barn*, from W.A. Foster & Deane G. Carter, *Farm Buildings* (New York: John Wiley & Sons, 1922), 75.

In a small number of documented cases, a barn will have a floor plan that varies in significant ways from both the transverse frame and the English types, as at MN 715 (Figure 238) which has a cross aisle much like an English barn off center at one end, and may have a transverse aisle through the rest of the barn (the interior was not inspected). Another variation is for a transverse frame barn to have two or more aisles as at the large stock barn at MN 917 (Figure 239), which has two aisles, each flanked by stables, or the barn at MN 685 (Figure 240), which has three with the added shed along the right side. Both of these barns have very large loft spaces to store a large amount of hay for the animals sheltered inside.



Figure 235: MN 217, Tobacco Barn, mid twentieth century, Holy Cross vicinity.

Another type of barn sometimes found in the region (at least two documented examples) is a bank barn, which may be transverse frame or English or some variant in plan. The distinguishing feature of the bank barn is that it is set into the side of a hill, so that access can be gained on two levels. The lower level, being partly under ground, has some measure of relief from hot or cold weather for sheltering farm animals. A good example is found at WS 633 and which has an open entry on the down hill end (Figure 241) flanked by massive stone foundations, and an English barn type cross aisle on the uphill side (Figure 242). A 20th century example can be found at WS 98 (Figure 271 - Figure 273).

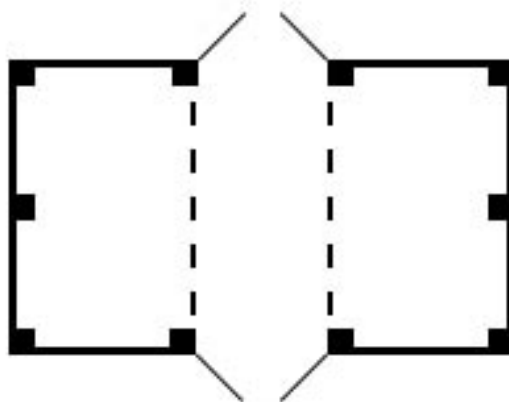


Figure 236: English Barn plan (drawing, author).



Figure 237: *WS 315, Multi-purpose Barn, early-mid twentieth century, Fredericktown vicinity. A modified English barn with extended end sections for storage of farm machinery. The central section has stables, and hay was stored in the loft. The concrete structure in the foreground is a cistern.*



Figure 238: *MN 715, Stock or Multi-purpose Barn, twentieth century, Jessietown vicinity.*



Figure 239: MN 917, Cattle or Stock Barn, mid twentieth century, Bradfordsville vicinity.



Figure 240: MN 685, Multi-purpose Barn, late nineteenth-early twentieth century, Gravel Switch vicinity. See also Figure 255.



Figure 241: *WS 633, Stock Barn, mid-late nineteenth century, Deep Creek vicinity. See also Figure 242.*



Figure 242: *WS 633, Stock Barn, uphill side. See also Figure 241.*

Barn Construction

Log Barns

Although 95% of the barns surveyed were frame, 12 log barns were documented in the survey area. It is possible that some log barns were not identified as such, because they often look like any other barn from the exterior, as does MN 514 (Figure 243). It is only upon going inside that one finds one or more large log cribs (Figure 244). In some cases, although none were found in the current survey, the crib inside turns out to be an old log house. It can be a mistake to assume that the original barn consisted of just the log portion: pretty often, the frame extensions around the log crib turns out to be an original part of the barn. The log cribs often held hay or corn, while the shed extensions sheltered stock. The crib served as a strong internal structural element around which a larger frame building could be anchored. One clue to the larger frame being original is that the top logs are often cantilevered out beyond the log pen to the extent of the whole barn to support the roof. Intermediate logs are also often extended to support the sheds. Even where the larger barn is a later alteration of the original log pen, it is typically good preservation practice to preserve the whole, as the exterior barn helps protect the log pen inside, and is a reflection of a later historic period itself.

Larger log barns sometimes have two or more interior cribs: in the current survey, WS 423 is the only multi-crib barn documented, having two log cribs (Figure 245). The two cribs may not have been built at the same time, and there is some chance that one crib was a house, but the building needs to be inspected more closely. Although log barns were largely replaced by frame structures by the late 19th century, log barn construction continued well into the 20th century, as at MN 509 (Figure 246, exterior, and Figure 247, interior). In later construction, the logs are more typically round than hewn.



Figure 243: MN 514, Mid-nineteenth century Log Barn, Raywick vicinity, exterior view. See also Figure 244.



Figure 244: MN 514, Interior. See also Figure 243.



Figure 245: *WS 423, Early-mid nineteenth century Log Barn, Mooresville Vicinity.*



Figure 246: *MN 509, Log crib barn, early twentieth century, Raywick vicinity, exterior. See also Figure 247.*



Figure 247: MN 509, interior. See also Figure 246.

Frame Barns

Frame barns account for over 95 percent of those surveyed. Frame construction supplanted log over time in barns, just as it did in houses. Most of the documented barns in Marion and Washington counties are late 19th through mid-20th century sawn and nailed frame. Just one heavy timber frame barn was identified in the survey, at WS 451 (Figure 248). In the figure, we see a detail of two sills joined to a corner post, resting on a precarious looking dry laid stone pier. The timbers have the characteristic rough hand hewn appearance of an early frame. A comparison of that foundation with a late 20th century one such as that at MN 602 (Figure 249), with its circular sawn post and poured concrete pad, hints at the revolution that took place in barn construction over the century to a century and a half between the two. From the outside, it's more apparent when we compare WS 451 (Figure 250) with MN 602 (Figure 251). The trend in the technological development of framing over the course of history examined in this survey is to use those two elements to enclose more volume of space with less material. Although it moved from mortise and tenon joinery to simply being nailed together, the traditional braced barn frame (Figure 234) remained essentially similar in form for a long period of time until new techniques

were engineered that allowed the load of the roof to be carried down to the foundation without the intervening posts and braces. In stock and dairy barns with hay loft storage, this trend toward more open space with fewer interruptions from posts (WS 324, Figure 252), ultimately led to lattice or laminated truss examples with no posts interrupting the loft at all (MN 188, Figure 253). Tobacco barns, however large they became, are at the opposite extreme internally, with the interior space tightly crisscrossed with posts and rails upon which to hang the tobacco (WS 403, Figure 254).

It can be very difficult to accurately date frame barns. Most dating clues such as nail types or tool marks give you a rough idea of a date the building could not be older than, but are of less clear help in defining just how much later the building might be. It's not uncommon to find hand-hewn sills or posts in late 19th century barns. The circular sawn framing of a late 19th century barn such as the one at MN 685 (Figure 255, see also Figure 240) is often not far different from that of a half century later (WS 1123, Figure 256). Clues to dating later barns often come more readily from researching more contextual information and from oral history. Interior fittings such as feeding apparatus or hay pulleys may be datable by researching the manufacturer, or the building design might compare closely with dated examples from agricultural catalogs (Figure 275).



Figure 248: *WS 451, Timber Frame Barn, nineteenth century, Polin vicinity, detail of sills and post. See also Figure 250.*



Figure 249: *MN 602, Multi-purpose Transverse Frame Barn, late twentieth century, Bradfordsville vicinity: detail of post on cement foundation block. See also Figure 251.*



Figure 250: *WS 451, exterior. See also Figure 248.*



Figure 251: *MN 602, exterior. See also Figure 249.*



Figure 252: *WS 314, Dairy Barn, early twentieth century, interior view of loft, Fredericktown vicinity. See also Figure 277.*



Figure 253: *MN 188, Multi-purpose or Dairy Barn, 1920s, Holy Cross vicinity.*



Figure 254: *WS 403, Tobacco Barn, early-mid twentieth century, Mooresville vicinity.*



Figure 255: *MN 685, Multi-purpose Barn, interior of aisle. See also Figure 240.*



Figure 256: *WS 1123, Feeding/Stock Barn, early-mid twentieth century, Willisburg.*